

Date: Wednesday, 21/01/2009 9:11:51 AM
 User: Linda Lacelle

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : WHEEL ASSEMBLY
Job Number : 45005	
Estimate Number : 12099	
P.O. Number :	Part Number : D3233041
This Issue : 21/01/2009 S.O. No. :	Drawing Number : D3233 REV B
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : LARGE FAB ASSY	Drawing Revision : B
Previous Run : 43766	Material :
Written By :	Due Date : 28/01/2009 Qty: 6 Um: Each
Checked & Approved By :	
Comment : Est. C 05.07.18 D3233-5 was D3332-5; Qty changed by half K J/JLM	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
----------------	------------------------------	----------------------

1.0	D32335	Hub Sleeve
-----	--------	------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)

Hub Sleeve

Pick:

Qty Part Number

Description Batch

1

D3233-5

Hub Sleeve

B43416(3)
B43626(3)

SAD 09-01-21 (6)

2.0	D32337	Shaft Sleeve
-----	--------	--------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)

Shaft Sleeve

Pick:

Qty Part Number

Description Batch

1

D3233-7

Shaft Sleeve

47627
B37059-2

SAD 09-01-21 (6)

3.0	D32339	Tire & Rim Assembly
-----	--------	---------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)

Tire & Rim Assembly

Pick:

Qty Part Number

Description

Batch

1

D3233-9

Tire & Rim Assembly

B43628

SAD 09-01-21 (6)

4.0	NKI 3020	BEARING
-----	----------	---------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 12.0000 Each(s)

Bearing

Pick:

Qty Part Number

Description

Batch

2

NKI 30/20

Bearing & Inner Sleeve

M1103102

SAD 09-01-21 (6)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 21/01/2009 9:11:51 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WHEEL ASSEMBLY

Job Number: 45005

Part Number: D3233041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

SHIM STOCK

.004" Brass Shim Stock



Comment: Qty.: 4.0000 f(s)/Unit Total : 24.0000 f(s)
.004" Brass Shim Stock

Pick:

Qty Part Number Description

Batch

4 Shim Stock 0.004" thick Brass Shim Stock M110310

SAD 09-01-21 (6)

6.0

35X45X7

Bearing Seal



Comment: Qty.: 2.0000 Each(s)/Unit Total : 12.0000 Each(s)
Bearing Seal

Pick:

Qty Part Number Description Batch

2 35x45x7 Axel Seal

or CR 35x45x7 HMS4 R

M110232 (3) ✓
M110615 (9)

SAD 09-01-21 (6)

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Press out bearings that are supplied with D3233-9 wheel and discard them.

Cut shims and assemble as per Dwg D3233

Spray inside hub and bearing with LPS-3 & block hole with a clean dry rag for storage.

SAD 09-01-21 (6)

8.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

09-01-23 (6)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

9/1/23

SP

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/01/26

Job Completion



u 09-01-26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

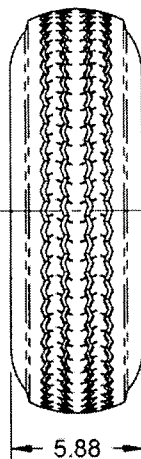
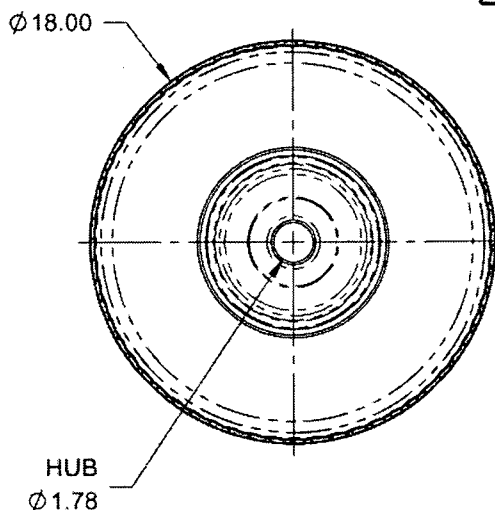
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



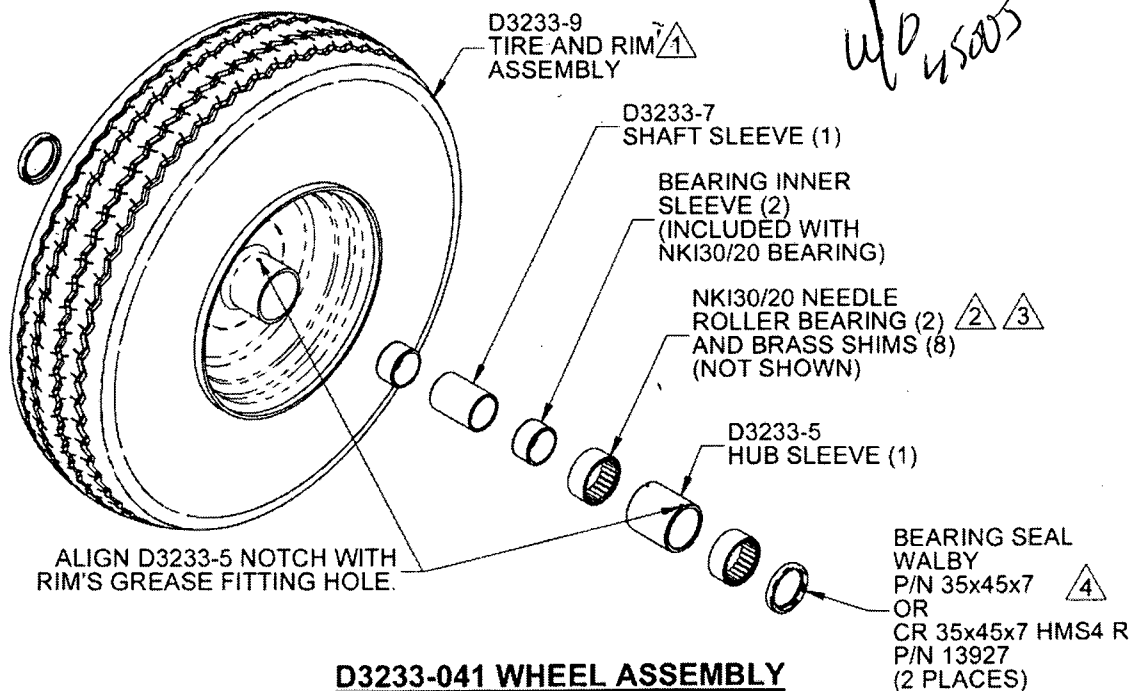
DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3233	REV. B SHEET 1 OF 3
DATE 05.03.08	TITLE WHEEL ASSEMBLY		SCALE 1:1
A	05.02.18	NEW ISSUE	
B	05.03.08	ADDED BEARING SEALS	



RELEASED
05/05/04

WHEEL SPECIFICATIONS		
SIZE	MAXIMUM LOAD	MAXIMUM INFLATION LOAD
TIRE: 19.0 x 5.8 RIM: 5.70 x 8.0	910 LBS (RANGE C)	90 PSI*

* MANUFACTURER'S RECOMENDATIONS
ARE 75 PSI FOR HIGH SPEED USE.



D3233-041 WHEEL ASSEMBLY

NOTES:

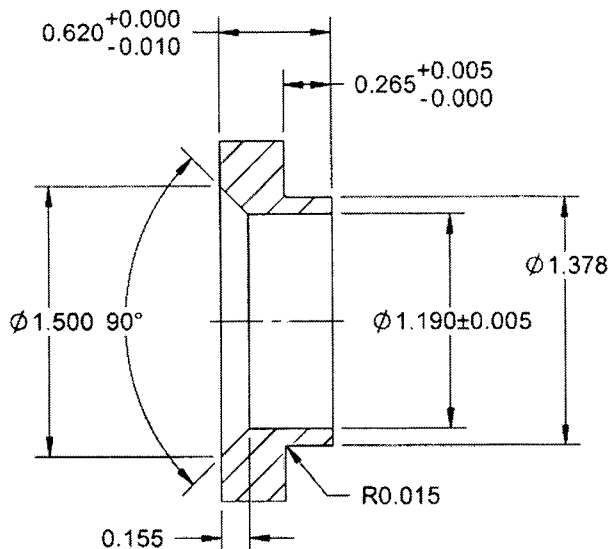
- 1) POSSIBLE SUPPLIER: McMASTER-CARR, P/N 8353T74
- 2) POSSIBLE SUPPLIER: GENERAL BEARING
- 3) PRESS FIT NEEDLE ROLLER BEARINGS INTO RIM HUB WITH
(4) 0.5 X 0.75 X 0.004 BRASS SHIMS PER BEARING, (1) AT EACH QUADRANT.
- 4) POSSIBLE SUPPLIER: GENERAL BEARING
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

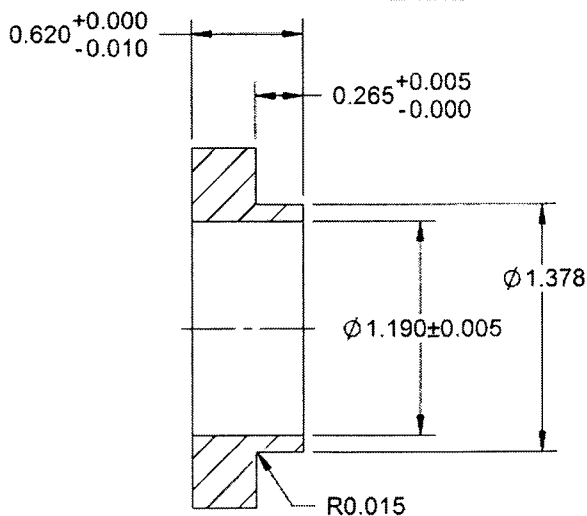
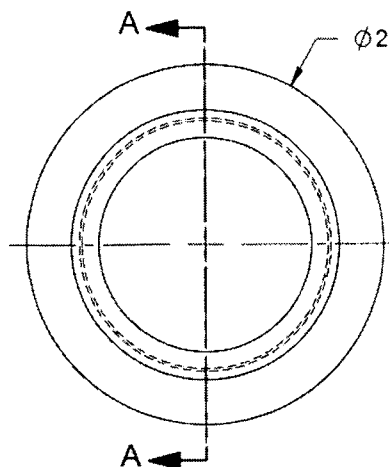


DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3233 REV. B SHEET 2 OF 3
DATE 05.03.08	TITLE WHEEL ASSEMBLY	SCALE 1:1



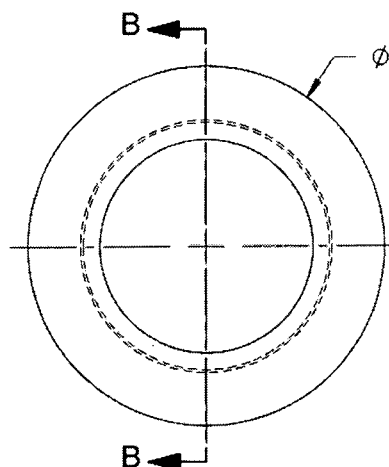
SECTION A-A

D3233-1 INSIDE WASHER



SECTION B-B

D3233-3 OUTSIDE WASHER



NOTES:

- 1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513-00 MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS (REF. DART SPEC. M1020TR)
- 2) FINISH: POWDER COAT FIRE RED (REF. 4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

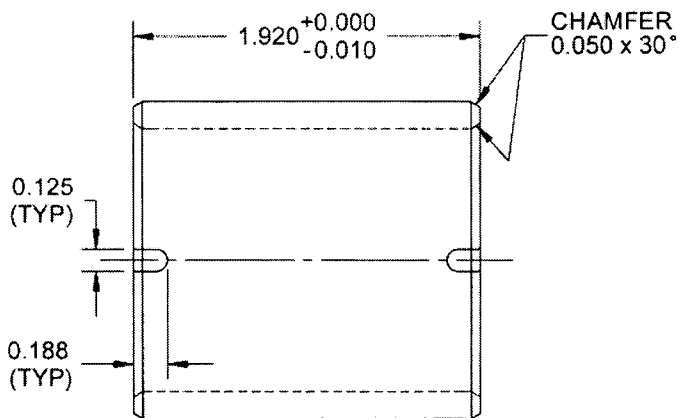
COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

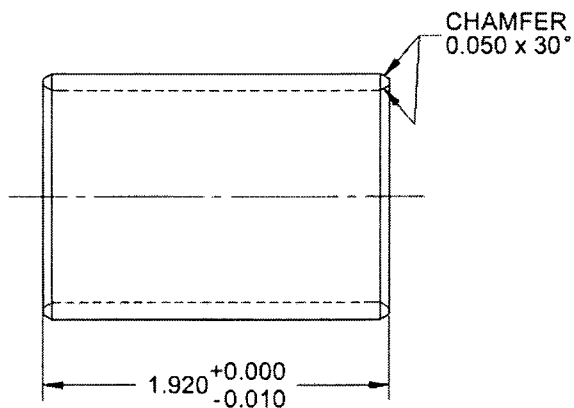
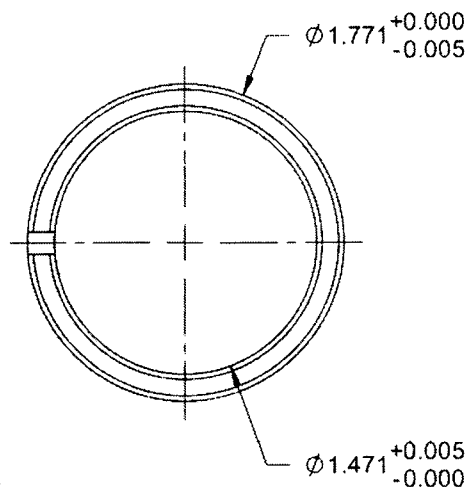


DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3233	REV. B SHEET 3 OF 3
DATE 05.03.08		TITLE WHEEL ASSEMBLY	SCALE 1:1

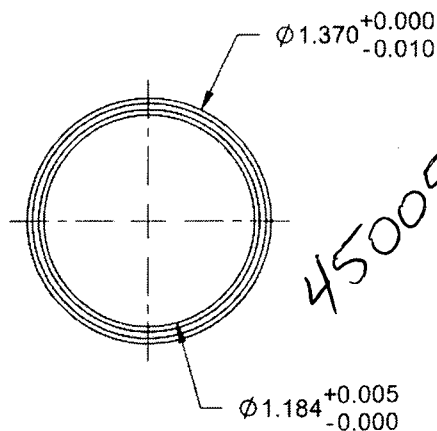
RELEASED
[Signature]
05/05/04



D3233-5 HUB SLEEVE



D3233-7 SHAFT SLEEVE



NOTES:

- 1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513-00
MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS
(REF. DART SPEC. M1020TR)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.030

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.